

FIELD TRIPS OF THE CLUB

Members of the Torrey Botanical Club party at the home of Dr. Will S. Monroe, Couching Lion Farm, North Duxbury, Vt., over the Fourth of July week end, led by William Gavin Taylor, report among their finds the Luminous Moss, *Schistostega osmundacea*, and the Rock Brake, *Cryptogramma Stelleri* both on talcose schist rock, in Fayston Pass, south of Couching Lion, and east of Stark Mountain. As explained by Mr. A. T. Beals, who found this station first, in 1929, the luminosity is due to light reflecting qualities in the structure of the protonema. The golden-green glow in the dark recesses under an overhanging rock is described as quite surprising by Mr. J. A. Allis, a member of the club, who visited the site later, and found the Rock Brake, newly reported there. The party which visited Smuggler's Notch found the stand of *Saxifraga aizoon*, which has been reported before and brought back a plant to establish in Dr. Monroe's alpine garden, which, by the way, was finer than ever this year.

Twenty members and guests of the club took part in the excursion to Bear Mountain Park, Sunday, July 20, under the leadership of Mr. Raymond Adolph, forester of the Palisades Interstate Park. The shores of Queensboro Lake yielded some interesting water plants, including *Alisma Plantago-aquatica*, and *Lythrum Salicaria*, small stands of the latter having advanced from the marshes along the Hudson in recent years and established themselves at several of the inland lakes and beaver ponds in the Park. The spread of the Purple Looses-trife, from its large and dense colonies along the Hudson, during the past ten or twenty years, has been continued evidence of the adaptiveness of the beautiful and interesting immigrant from Europe, which is now one of the commonest of our marsh plants, not only of brackish spots along the Hudson as far south as Piermont, but in fresh water marshes, along the Wallkill, on tributaries of the Hudson in Dutchess and Columbia counties, and more recently along the upper part of the Hackensack meadows, near Little Ferry. It is now established in several of the park lakes, and in the beaver meadows near Lake Nawahunta and Middle Kanawauke Lakes, and seems to thrive as well in fresh water as in brackish.

On the annual visit to Spruce Pond, on the western border of the Harriman State Park, on July 27, under the leadership of Archibald T. Shorey of the Brooklyn Boy Scouts, the interesting flora of the place was enjoyed by a party of ten. New visitors to the place were introduced to the species for which it is notable, the large stand of Virginia Chain fern, the museum piece of *Drosera longifolia*, in bloom on the half submerged log at the south end, and the colony of *Calla palustris* on the west side. The plants of *Andromeda polifolia*, an uncommon northern shrub in this latitude, among the *Chamaedaphne calyculata* beds along the south shore seem to be increasing. The red spruce and American larch, which have one of their southernmost stands at Spruce Pond, interested the field students.

On the excursion of Sunday, August 3, to Bradley Mine, in the Harriman Park, led by the chairman of the field committee, two plants which attracted interest among the usual late summer composites, were *Geranium pusillum*, a pale small-flowered species of this genus, along the road south of the Harriman dairy, and *Corydalis sempervirens*, the latter not so much because of any rarity, but for its adaptiveness to the particular conditions. It was found along the new park entrance road from Lower Cohasset Lake to Arden. Recent blasting had destroyed some mature plants on the ledges, but their seeds were ripened and as they were scattered over the dirt fill of the road, hundreds of them had taken root and were sending up their cotyledons. This plant, growing on arid ledges, and of a rather delicate texture, seems able to stand a lot of drought and even of burning of the older plants by spring forest fires, for the seeds spring up in late summer and maintain it.

Bradley Mine was of considerable geological interest, with the great chamber from which the iron ore was taken and a large dike of comptonite, a kind of basalt, seen in the walls of the entrance; and a coating of the old Grenville limestone, covered with spongy looking pyroxene deposits. We met in the mine Mr. Labounsky, a field worker for Professor J. J. Colony of Columbia University. Prof. Colony is working on a report of the New York State Museum on the geology of the Schunemunk quadrangle which will be of great interest to hikers who like to know the geology of the park.

While working on the Kittatinny Mountain section of the

Appalachian Trail this summer, I found another stand of the Bunchberry *Cornus canadensis* which appears to be the farthest south in this latitude. I have previously reported it on Schunemunk Mountain in Orange County N.Y. at 1600 feet and in a swamp farther north on Kittatiny Mountain at 1500 feet. This new location is in a swamp about 1400 feet above sea at the head of a brook which plunges down the steep west side of the mountain to enter the Delaware River near Poxono Island, about eight miles above Water Gap. As in the other stands it did not seem happy. It displayed few evidences of blossoms, and no fruit whatever. Apparently it was maintaining itself only by extension by stolons. These few stands, in the southern New York and northern New Jersey highlands, at elevations up to 1500 feet, where it seems to find conditions somewhat approximating those farther north in the high Catskills and in northern New England where it is common, are presumably relicts of the colder conditions of earlier times in the last post-glacial period.

Another evident post-glacial relict which I found this summer with Forester Raymond Adolph of the Palisades Interstate Park, was a large and thriving colony of the Bearberry, *Arctostaphylos uva-ursi*, on an open ledgy hilltop north of Long Pond, overlooking the Central Valley-West Point highway. It covers half an acre and showed plentiful green fruit. This is the fourth of such stands of this plant I have found in the Orange County highlands, where it has been reported as rare; two others being in the Harriman Park, on Black Mountain and Fingerboard Mountain—both on the Appalachian Trail, and the other on Mombasha High Point, southwest of Mombasha Lake, also on the Appalachian Trail.

Evidence of the desperate efforts of plants at survival and the advantage taken of the slightest encouragement, were seen in a badly burned area on the south end of Kittatiny Mountain, west of Branchville, N. J. Several hundred acres of the mountain top were burned over, during the August drought, in a blaze exceedingly fierce for summer conditions, but everything was so dry that the destruction was as bad as is seen in spring or fall forest fire hazard periods. Even the thin vegetable soil was reduced to black ashes; the trees and shrubs were burned to death, and yet a few bits of green were to be

seen. They were the cotyledons of plants of open ledges, *Corydalis sempervirens*, *Geranium carolinianum*, *Saxifraga virginiensis*, and perhaps *Phlox subulata*. The parent plants appeared to have been burned to nothing, roots and all, but they had ripened their seeds before the blaze and scattered them on the ground. A week after the fire there was a heavy rain, and the seeds evidently have survived destruction by the searing heat, for scores of tiny seed leaves were coming up in the blackened humus. A box tortoise, found dead nearby, was not so fortunate; the poor fellow had been roasted in his shell, before he could escape the swift flames with his slow and clumsy gait.

Down from the summit a bit, where bracken fern had been thick, and where its drought-dried leaves burned like tinder, the roots had survived in some places, and the plant was sending up new fronds, as if it were April. This fire was said to have been started deliberately by huckleberry pickers, who believe such burnings cause the berry bushes to come in thick for a while. The only berry fruits which appeared to have survived and which lay in the burned ground, were those of the Chokeberry, *Pyrus arbutifolia*, whose rather heavy pulpy covering of the seeds had probably protected them so that they will sprout, but they will do the huckleberry pickers no good.

Members of the Torrey Botanical Club and of the Trail Campers of America greatly enjoyed a visit to the gardens on the estate of Clarence M. Lewis, banker, at Skyland, near Sterlington, N.Y., Sunday, Sept. 14. The visit was arranged by Mr. Charles Crowell, founder of the Trail Campers, who have a lodge on Stony Brook, north of Sloatsburg, which has been used by members of the Brooklyn Nature Club and other nature students; and upon the invitation of Mr. Lewis, through his superintendent, Mr. Kendall. Mr. Lewis has large numbers of alpine species, obtained from M. Correvon, the Swiss specialist in such plants, which are doing well in the soils carefully adapted to their needs. Scientific names are shown on stamped metal tags, and the exhibit is very instructive. Mr. Lewis' gardener has also made a sort of Nature Trail of native plants, brought from the woods on his 2,000 acre estate, or from other parts of the country. A great display of horticultural, named, forms of an aster, the ancestors of which were our common New England Aster, *Aster novae-angliae*, made a splendid sight.

Dr. A. B. Stout of the New York Botanical Garden has some surplus specimens of the Day Lily, *Hemerocallis*, with which he has long been working, installed in this garden, through Mr. Lewis' cooperation. This flower collection is a treat, in assembling so many exotics, alpine and others, in so small a space and it would be a privilege if the Torrey Botanical Club could make an annual visit there.

RAYMOND H. TORREY
Chairman Field Committee

FIELD TRIP OF SUNDAY, SEPTEMBER 7

Thirty two members of the club and friends were led on this trip at Caldwell, N. J., by Professor Oliver P. Medsger. The trip led through some interesting second-growth woods and over a small hill whose dry top showed fine clumps of the stiff-leaved aster, *Aster* or *Ionantis linariifolius*. A number of species of aster and goldenrod were noted, also species of *Desmodium*, including *nudiflorum*, *rotundifolium*, *grandiflorum*, *Dillenii*, and *paniculatum*. Fortunately the fruit of these latter were not quite ripe so comparatively few clung to the clothing of the party. Some fine plants of the smooth false foxglove were seen. On top of the hill where lunch was eaten there was a plentiful growth of the shrubby bitter sweet, but most of the fruiting vines had been pulled down and the branches broken off, the ground being littered with the broken twigs. Here, as in many places near the cities, the vines found are mostly staminate, the pistillate plants having been destroyed by those who love beauty, or can make a profit from others love of it.

FIELD TRIP OF SUNDAY, SEPTEMBER 14

In spite of the usual deterrents for this season of the year; namely hot, muggy weather and an army of mosquitoes prepared for the attack, ten people made the trip to Fresh Kills and vicinity Sunday, September 14th. On account of the great crowd of Sunday excursionists at the bus at St. George, the trip was taken in reverse order, the party entraining for Eltingville, whence a bus was taken to Richmond Road at its intersection with the highway across Fresh Kills. Here botanizing commenced.

As usual at this time of the year, the meadows were adorned here and there with large colonies of *Helianthus giganteus*; and *Solidago maritima*, the seaside goldenrod, was beginning to contribute its share to the picture. Another *Helianthus*, *H. tuberosus*, the Jerusalem artichoke, was found well established near the old gravel quarry, and specimens with good tubers were obtained. Close by, *H. annuus*, the common sunflower, was growing on a rubbish heap. Other composites observed were *Eupatorium perfoliatum* and *pubescens*, as well as tall, vigorous, glaucous-stemmed plants of *E. purpureum*, one of the forms of the plant known commonly as Joe-Pye Weed. The closely related *Mikania scandens*, climbing over roadside plants, was much in evidence. Three wild lettuces, *Lactuca spicata*, *canadensis*, and *scariola* were found. *Bidens frondosa*, *connata*, and *comosa* were seen, the last being of frequent occurrence. Besides *Solidago sempervirens*, of the goldenrods, *S. rugosa*, *canadensis*, and *graminifolia* were well represented, the last in extensive colonies. *Erechtites hieracifolia* was also of frequent occurrence and extremely variable in height. Of the asters, *A. novae-angliae*, *novi-belgii*, *paniculatus*, *multiflorus*, and *subulatus* were seen and collected, the last being frequent in the brackish soil of the marshes. Another interesting plant was the orchid, *Spiranthes cernua*, growing low down among the high grass and other plants near the creek just below the Episcopal church, where there is probably very little salt present. *Cicuta maculata*, the poison hemlock, is of frequent occurrence in the upper and fresher portion of the marshes. *Ptilimnium capillaceum* was also found in similar locations. *Zannichellia palustris* was found in fruiting stage in the upper parts of the creek. Patches of the interesting grass, *Tripsacum dactyloides*, whose grain-bearing heads are brittle and break off in sections, were also seen. There were, of course, vast colonies of the reed, *Phragmites communis*, *Spartina cynosuroides*, and *Sorghastrum nutans*. *Pluchea camphorata*, the salt marsh fleabane, and the beautiful, rosy-tinted *Sabatia stellaris*, were found in their accustomed haunts, but not in great abundance. Near them was the seaside Gerardia, *G. maritima*. The trip ended in the late afternoon at the headwaters of the stream, near the Episcopal church at Richmond.

FIELD TRIP OF SUNDAY, SEPTEMBER 21

The excursion to Franklin Notch, in the Preakness Mountain region northwest of Paterson, N.J., Sunday, Sept. 21, which was scheduled for the study of agaric fungi, under the leadership of Dr. William S. Thomas, was altered, owing to the enforced absence of Dr. Thomas in Europe, to a general one on fall flowers, although one or two mushroom addicts found plenty to interest them, too especially some large masses of the honey agaric, red russulas, and Caesar's Amanita. Ten were present.

The most unusual plant seen was *Pedicularia lanceolata*, the Swamp Lousewort, in the meadows along Barbour's Brook. It is quite different from *P. canadensis*, the common woodland species blooming in the spring; with stiff upright stems, one to three feet high, and much larger flowers than the spring species. A large colony of *Spiranthes cernua* was seen in this swamp, with *Lobelia siphilitica*, *Bidens cernua*, *Sanquisorba canadensis* (still in bloom), and *Gerardia purpurea*. *Spiranthes gracilis* was found in a dryer situation.

In the Notch, the interesting flora maintains its numbers with large masses of Blue Cohosh, *Cañlophyllum*, in plentiful fruit; *Clematis verticillaris*; one of the few places where it is still found within 30 miles of New York; large stands of the Upland Lady Fern—some of the fronds over three and a half feet long, exceeding the Cinnamon Fern near by—*Allium tricoccum*, the Wild Leek, whose black, shot-like seeds were striking at the season; Wild Ginger, Herb Robert, and plentiful Maidenhair and Ebony Spleenwort. Cardinal Flower was still in bloom in the wet spot at the south end of the Notch.

On the old road west of High Mountain, the Golder Saxifrage, *Chrysosplenium americanum*, was a plant rather rare in the near environs of the metropolitan district. Cancer Root, *Conopholis americana*, was another interesting find.

RAYMOND H. TORREY

NEWS NOTES

The New York Botanical Garden is offering a series of courses on the growing of plants and on plant classification. One set of courses is on Tuesday afternoons, the other on Saturdays.